

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A solid state thermal apparatus for dissipating heat from a heat source, the apparatus comprising:

a multi-stage directional heat transferring converter enclosure having an open-ended passageway, the passageway defining first and second ends, each of said stages separated by an insulator;

a plurality of solid state devices carried on said heat transferring converter enclosure and thermally coupled to said heat source and said heat transferring enclosure, at least one said solid state device associated with a stage of said heat transferring enclosure for conductive transfer of heat energy from said solid state devices into said open ended passageway;

a thermal cable coupling said heat source with said diode array;

a thermal conductive arrangement incorporated into said heat transferring converter for conductive transfer of heat energy from said plurality of solid state devices into said open ended passageway; and

a blower means disposed at a selected the first end of said passageway forcing heat energy in into and through said passageway through said passageway to the second end of the passageway.

2. (Currently Amended) The solid state thermal apparatus defined in Claim 1 wherein:

said selected first end of said passageway is an inlet and a non-selected said second end of said passageway is an exhaust exit; and

said blower means is disposed in said inlet and with forced heat energy is forced through said exhausting via said exit.

3. (Currently Amended) The solid state thermal apparatus defined in Claim 2-1 wherein said solid state devices include a plurality of diode arrays.

4. (Currently Amended) The solid state thermal apparatus defined in Claim 3 wherein:

~~said thermal conductive arrangement includes a plurality of stages indexed with each of said diode arrays the plurality of said plurality of stages is comprised of a plurality of panels on which the plurality of diodes are operably connected, for transferring heat energy away from the diodes to said thermal passageway.~~

5. (Currently Amended) The solid state thermal apparatus defined in Claim [[4]]1 wherein:

each of said thermal conductive stages is composed of a carbon graphite composition capable of conducting heat energy at least five times the rate of heat energy conduction of copper having a high rate of thermal conductivity.

6. (Currently Amended) The solid state thermal apparatus defined in Claim [[5]] 3 including:

a power source operably coupled to said diode arrays by a plurality of positive and negative terminals on said diode arrays.

7. (Currently Amended) The solid state thermal apparatus defined in Claim 6 including:

a pair of conductor plates ~~associated with~~, each of said diode arrays connected between said pair of conductor plates; and said positive and negative terminals connected to each of said pair of conductor plates respectively.

8. (Currently Amended) A solid state thermal apparatus for dissipating heat from a heat source, the apparatus comprising:

~~a multistage, directional heat transferring converter enclosure having an enclosure defining an open-ended passageway and a plurality of successive heat transference stages, each stage insulated from each other;~~

an array of panels, with each panel carrying a plurality of diodes and the plurality of diodes thermally coupled to said heat source, the array of panels carried on the exterior of said heat transferring enclosure and disposed immediately adjacent to a respective heat transference stage for conducting heat energy from said array of panels to said heat transference stages for conductive transfer of heat energy into said open-ended passageway;

~~a thermal cable coupling said heat source with said array of panels;~~

~~said array of panels carried on the exterior of said heat transferring converter so as to be in a heat transference relationship therewith;~~

~~said enclosure having a plurality of heat transference stages insulated from each other; and~~

~~each panel in said array of panels disposed immediately adjacent to a respective heat transference stage for conducting heat energy from said panels to said heat transference stages for conductive transfer of heat energy into said open-ended passageway.~~

9. (Currently Amended) The solid state thermal apparatus defined in Claim 8 wherein:

 said passageway includes an inlet and an outlet with a blower mounted in said inlet for forcing a flow of ambient air through said passageway ~~for and exhausting collected~~ heat energy ~~collected~~ via said outlet.

10. (Currently Amended) The solid state thermal apparatus defined in ~~Claim 9~~ Claim 8 wherein:

 each of said heat transference stages is composed of carbon graphite composition composite material having a high rate of thermal conductivity.

11. (Cancelled)

12. (Currently Amended) The solid state thermal apparatus defined in ~~Claim 10~~ Claim 8 including:

 a power source operably connected to said diodes.

13. (Currently Amended) The solid state thermal apparatus defined in Claim 12 Claim 8 wherein further comprising:

~~said a thermal cable that couples said array of panels with said heat source includes a plurality of parallel paths carried on a flexible cable.~~

14. (Currently Amended) The solid state thermal apparatus defined in Claim 13 wherein:

each of said diodes is a ceramic quartz diode; and
said graphite material is heat conductive directional.

15. (New) The solid state thermal apparatus defined in Claim 1 wherein: the plurality of stages are arranged in a stacked arrangement.

16. (New) The solid state thermal apparatus defined in Claim 5 wherein: said carbon graphite composition is heat conductive directional.

17. (New) A solid state thermal apparatus for dissipating heat from a heat source, the apparatus comprising:

an array of panels thermally coupled with said heat source with each panel carrying a plurality of ceramic quartz diodes;
a thermal cable having a plurality of parallel paths carried on a flexible cable, the thermal cable coupling the heat source with the array of panels;

a multi-stage directional heat transferring enclosure having an open-ended passageway and a plurality of heat transference stages insulated from each other, said heat transference stages composed of carbon graphite composition having a high rate of thermal conductivity and being heat conductive directional;

said array of panels carried on the heat transferring enclosure, each panel disposed immediately adjacent to a respective heat transference stage for conducting heat energy from said panels to said heat transference stages for conductive transfer of heat energy into said open-

Serial No.: 10/728,153

Response to Office Action of June 8, 2007

Attorney Docket: BASIC-004A

ended passageway, each panel includes a multiplicity of diodes for conducting heat energy by pulling heat energy from said heat source; and

a power source operably connected to said diodes.